AUTHOR INDEX TO VOLUME 39

Ait-Yahia, A., 303
Amano, R. S., 421
Baek, S. W., 617
Bégue, M., 603
Białecki, R. A., 451
Blobner, J., 451
Burns, P. J., 325
Carpenter, M., 207, 231
Chen, T-C., 405
Chen, Y. S., 345
Christopher, D. M., 189
Class, A. G., 101, 127
Cuniasse-Languans, I., 603
Damia, J., 79
Demuren, A. O., 207, 231
Dolaghan, J. S., 325
Dumoulin, J., 603
Gosman, A. D., 1
Günther, C., 101, 127
Guo, Z., 371
Ho, J.-R., 167
Horvat, A., 61
Huang, J., 21
Jasak, H., 1
Jiaung, W.-S., 167
Kim, M. Y., 617
Kljenak, I., 61
Kuhn, G., 451
Kumar, S., 371
Kuo, C.-P., 167
Lai, Y. G., 21
Lee, C. W., 389
Lefebvre, G., 303
Lefèvre, F., 277
Le Niliot, C., 277
Lin, C.-L., 21
Liu, F., 257
Liu, G. R., 421
Liu, J., 345
Lo, S., 257
Marn, J., 61
Mazhar, Z., 91
Moon, S. Y., 389
Ozoe, H., 435
Palomo, E., 303
Park, J. H., 617
Patankar, S. V., 525, 545
Radmehr, A., 525, 545
Reyes, M., 79
Rincon, J., 79
Rubini, P., 151
Sanderson, V., 151
Schrage, D. S., 563
Sheu, T. W. H., 479
Sohn, C. H., 389
Son, G., 45, 509
Song, B., 421
Tao, W.-Q, 435
Trombe, A., 603
Tsai, S. F., 479
Wen, J. X., 257
Wilson, R. V., 207, 231
Wintruff, I., 101, 127
Worthy, J., 151
Yan, Z., 585
Yu, B., 435
Zeeb, C. N., 325
Zhang, S. J., 345

SUBJECT INDEX TO VOLUME 39

Accuracy and Efficiency Study of Lattice Boltzmann Method for Steady-State Flow Simulations, 21
Adaptive Weighting Input Estimation Method to Contact Conductance, During Metal Casting Problem, 405
Application of ADI Methods to Predict Conjugate Phase Change and Diffusion Heat Transfer, On, 563
Applications of a Flowfield-Dependent Mixed Explicit–Implicit (FDMEI) Method to Heat and Fluid Dynamics Problems, 389

Boundary-Element Solution of Coupled Heat Conduction-Radiation Problems in the Presence of Shadow Zones, 451

Comparison of Interface-Following Techniques for Numerical Analysis of Phase Change Problems, 189
Comparison of Modified $k-\varepsilon$ Turbulence Models for Buoyant Plumes, 151
Computation of Boundary Layer Transition Using Low-Reynolds-Number Turbulence Models, 525
Computations of Complex Turbulent Flow, by Using Nonlinear $k-\omega$ Model, On, 421

Efficiency of an Inverse Method to Determine Natural-Convection Heat Transfer, 603
Efficient Monte Carlo Particle Tracing Algorithm for Large, Arbitrary Geometries, An, 325

Finite-Element Analysis of Incompressible Navier–Stokes Equations Involving Exit Pressure Boundary Conditions, 479

Higher-Order Compact Schemes for Numerical Simulation of Incompressible Flows, Part I: Theoretical Development, 207
Higher-Order Compact Schemes for Numerical Simulation of Incompressible Flows, Part II: Applications, 231

Incompressible Buoyancy Flow Benchmarking, On, 61
Interface-Tracking, Control-Volume Finite-Element Method for Melting and Solidification Problems—Part I: Formulation, An, 101
Interface-Tracking, Control-Volume Finite-Element Method, for Melting and Solidification Problems—Part II: Verification and Application, An, 127

Lattice Boltzmann Method for the Heat Conduction Problem, with Phase Change, 167

Modeling of Radiative Transfer in Optical Fiber Drawing Processes with Fresnel Interfaces, 345
Modified Pressure-Correction Scheme, for the SIMPLER Method, MSIMPLER, A, 435
Multiple Transient Point Heat Sources Identification, in Heat Diffusion: Application to Numerical Two- and Three-Dimensional Problems, 277

New Low-Reynolds-Number Turbulence Model for Prediction of Transition on Gas Turbine Blades, A, 545
Numerical Method for Bubble Motion with Phase Change, A, 509
Numerical Method, for Incompressible Two-Phase Flows with Open or Periodic Boundaries, A, 45

Parallel Computation of Turbulent Combustion, and Flame Spread in Fires, 585
Performance Comparison of a Buoyancy-Modified Turbulence Model with Three LRN Turbulence Models for a Square Cavity, 257
Procedure for the Treatment of the Velocity-Pressure Coupling Problem, in Incompressible Fluid Flow, A, 91

Radiation Element Method for Transient Hyperbolic Radiative Transfer in Plane-Parallel Inhomogeneous Media, 371
Residual Error Estimate for the Finite-Volume Method, 1

Simulation of Turbulent Flow in Irregular Geometries Using a Control-Volume Finite-Element Method, 79
Substructured Modeling, The Model Synthesis, 303
Unstructured Finite-Volume Method for Radiative Heat Transfer in a Complex Two-Dimensional Geometry with Obstacles, 617

CONTENTS TO VOLUME 39

CONTENTS Vol. 39, No. 1

1 Residual Error Estimate for The Finite-Volume Method **H. Jasak and A. D. Gosman**

21 Accuracy and Efficiency Study of Lattice Boltzmann Method for Steady-State Flow Simulations **Yong G. Lai, Ching-Long Lin, and Jianchun Huang**

45 A Numerical Method for Incompressible Two-Phase Flows with Open or Periodic Boundaries **Gihun Son**

61 On Incompressible Buoyancy Flow Benchmarking **Andrej Horvat, Ivo Kljenak, and Jure Marn**

79 Simulation of Turbulent Flow in Irregular Geometries Using a Control-Volume Finite-Element Method **M. Reyes, J. Rincón, and Juan Damia**

91 A Procedure for the Treatment of the Velocity-Pressure Coupling Problem in Incompressible Fluid Flow **Z. Mazhar**

CONTENTS Vol. 39, No. 2

101 An Interface-Tracking Control-Volume Finite-Element Method for Melting and Solidification Problems—Part I: Formulation **I. Wintruff, C. Günther, and A. G. Class**

127 An Interface-Tracking Control-Volume Finite-Element Method for Melting and Solidification Problems—Part II: Verification and Application **I. Wintruff, C. Günther, and A. G. Class**

151 Comparison of Modified $k - \varepsilon$ Turbulence Models for Buoyant Plumes **J. Worthy, V. Sanderson, and P. Rubini**

167 Lattice Boltzmann Method for the Heat Conduction Problem with Phase Change **Wen-Shu Jiaung, Jeng-Rong Ho, and Chun-Pao Kuo**

189 Comparison of Interface-Following Techniques for Numerical Analysis of Phase-Change Problems **D. M. Christopher**

CONTENTS Vol. 39, No. 3

207 Higher-Order Compact Schemes for Numerical Simulation of Incompressible Flows, Part I: Theoretical Development
A. O. Demuren, R. V. Wilson, and M. Carpenter

231 Higher-Order Compact Schemes for Numerical Simulation of Incompressible Flows, Part II: Applications **R. V. Wilson, A. O. Demuren, and M. Carpenter**

257 Performance Comparison of a Buoyancy-Modified Turbulence Model with Three LRN Turbulence Models for a Square Cavity **J. X. Wen, F. Liu, and S. Lo**

277 Multiple Transient Point Heat Sources Identification in Heat Diffusion: Application to Numerical Two- and Three-Dimensional Problems
C. Le Niliot and F. Lefèvre

303 Substructured Modeling of Linear Thermal Systems: The Model Synthesis **G. Lefebvre, E. Palomo, and A. Ait-Yahia**

CONTENTS Vol. 39, No. 4

325 An Efficient Monte Carlo Particle Tracing Algorithm for Large, Arbitrary Geometries
Charles N. Zeeb, John S. Dolaghan, and Patrick J. Burns

345 Modeling of Radiative Transfer in Optical Fiber Drawing Processes with Fresnel Interfaces **J. Liu, S. J. Zhang and Y. S. Chen**

371 Radiation Element Method for Transient Hyperbolic Radiative Transfer in Plane-Parallel Inhomogeneous Media
Zhixiong Guo and Sunil Kumar

389 Applications of a Flowfield-Dependent Mixed Explicit–Implict (FDMEI) Method to Heat and Fluid Dynamics Problems
S. Y. Moon, C. H. Sohn, and C. W. Lee

405 Adaptive Weighting Input Estimation Method to Contact Conductance During Metal Casting Problem **Tsung-Chien Chen**

CONTENTS Vol. 39, No. 5

421 On Computations of Complex Turbulent Flow by Using Nonlinear $k-\omega$ Model **B. Song, R. S. Amano, and G. R. Liu**

435 A Modified Pressure-Correction Scheme for the SIMPLER Method, MSIMPLER **Bo Yu, Hiroyuki Ozoe, and Wen-Quan Tao**

451 Boundary-Element Solution of Coupled Heat Conduction-Radiation Problems in the Presence of Shadow Zones **Jutta Blobner, Ryszard A. Białecki and Günther Kuhn**

479 Finite-Element Analysis of Incompressible Navier–Stokes Equations Involving Exit Pressure Boundary Conditions **S. F. Tsai and Tony W. H. Sheu**

509 A Numerical Method for Bubble Motion with Phase Change **Gihun Son**

CONTENTS Vol. 39, No. 6

525 Computation of Boundary Layer Transition Using Low-Reynolds-Number Turbulence Models **Amir Radmehr and Suhas V. Patankar**

545 A New Low-Reynolds-Number Turbulence Model for Prediction of Transition on Gas Turbine Blades **Amir Radmehr and Suhas V. Patankar**

563 On the Application of ADI Methods to Predict Conjugate Phase Change and Diffusion Heat Transfer **Dean S. Schrage**

585 Parallel Computation of Turbulent Combustion and Flame Spread in Fires **Z. H. Yan**

603 Efficiency of an Inverse Method to Determine Natural-Convection Heat Transfer **I. Cuniasse-Languans, A. Trombe, J. Dumoulin, and M. Bégue**

617 Unstructured Finite-Volume Method for Radiative Heat Transfer in a Complex Two-Dimensional Geometry with Obstacles **Man Young Kim, Seung Wook Baek, and Jae Hyun Park**

Following page 635:

Title Page to Volume 39
Author/Subject Indices to Volume 39